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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,715

12/05/2003

Robert J. Oliveira

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10/06/2006

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EXAMINER

ENSEY, BRIAN

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,715

Applicant(s)

OLIVEIRA ET AL.

Examiner

Brian Ensey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,9-14,29,31-34 and 47 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-46 and 48 is/are allowed.
- 6) ☒ Claim(s) 1-5,15-28,35-37 is/are rejected.
- 7) ☒ Claim(s) 8 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/18/04&4/28/05
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Species I, claims 1-5, 8, 15-28, 30, 35-46 and 48 in the reply filed on 7/20/06 is acknowledged.

In a telephone conversation with applicant's representative, David Crompton, on 9/20/06 the examiner discussed clarification of the dependency of claims 39-48 as being dependent on independent claim 38, not claim 33 as shown in the response to the current restriction election. The examiner will treat claims 39-48 as dependent on independent claim 38 and requires correction by the applicant in response to the current office action.

### ***Specification***

The use of the trademark ATTENUTECH, CHEMLOCK and STANOPRENE have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The disclosure is objected to because of the following informalities: The applicant should be consistent in naming element 20 "inner member 20", "extruded tube 20" and elongate tube 20" (See page 7, line 23 and page 8, line 8 for example).

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 15-18, 20-28 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein U.S. Patent No. 3,157, 245 in view of Werblud U.S. Publication 2003/0051939.

Regarding claim 1, Bernstein discloses a sleeve (15, tube) adapted for use with an elongate sound controlling structure (16, bushing), the sound controlling structure having an outer surface with a non-constant radial profile over at least a portion of its length (18, tapered terminal portion), the sleeve comprising: an inner tubular member having means to allow radial expansion of a portion of the length thereof in response to contact with the non-constant radial

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profile of the sound controlling structure to releasably secure the sleeve to the elongate sound controlling structure (15, tube stretches to flexibly fit over bushing 16, see Fig. 7 and col. 2, lines 28-49); and fitment means (13) to conform to an inner surface of an ear, where the fitment means is fixedly disposed over the inner tubular member (See Fig. 8 and col. 2, lines 50-64). Bernstein does not expressly disclose the sleeve (15) is disposable. However, Bernstein teaches the sleeve (15) deteriorates with age due to repeated bending and flexing and teaches an easily replaceable sleeve (See col. 1, lines 22-28 and col. 2, lines 32-64). The use of disposable earpieces is well-known in the art and Werblud teaches a sleeve (18) frictionally attached to a compliant fitment means (19) which are manufactured economical enough to be disposable (See Werblud Fig. 3 and paragraphs 0008 and 0019). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the earpiece of Bernstein with the disposable sleeve of Werblud for sanitation reasons (See Werblud paragraph 0008).

Regarding claim 2, the combination of Bernstein in view of Werblud further discloses the sleeve is compressively held in position on the elongate sound controlling structure (See Bernstein Fig. 7, col. 1, lines 22-28 and col. 2, lines 32-64 and Werblud paragraph 0019).

Regarding claim 3, the combination of Bernstein in view of Werblud further discloses the inner tubular member is generally cylindrical with a lumen extending therethrough (See Bernstein Fig. 5).

Regarding claim 4, the combination of Bernstein in view of Werblud further discloses the inner tubular member includes an inner surface and is configured to permit at least part of the inner surface of the inner tubular member to remain in contact with the outer surface of the

sound controlling structure when the disposable sleeve is disposed on the sound controlling structure (See Bernstein Fig. 7).

Regarding claim 5, the combination of Bernstein in view of Werblud further discloses the inner tubular member includes a distal region having a distal end and a proximal region having a proximal end, the tube having an inner surface and an outer surface (See Bernstein Fig. 5).

Regarding claim 15, the combination of Bernstein in view of Werblud does not expressly disclose the inner tubular member comprises polyethylene. However, the combination of Bernstein in view of Werblud teaches the tube is flexible plastic and expands to frictionally fit over the elongate sound controlling structure (16, bushing). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to use any semi-rigid flexible material including polyethylene for the expansion properties required for a frictional fit.

Regarding claim 16, the combination of Bernstein in view of Werblud further discloses the fitment means comprises resiliently compressible foam (20), the foam having an inner foam surface (See Werblud paragraph 0019).

Regarding claim 17, the combination of Bernstein in view of Werblud further discloses the inner foam surface is attached to an outer surface of the inner tubular member (See Werblud paragraph 0019).

Regarding claim 18, the combination of Bernstein in view of Werblud further discloses the inner foam surface is adhesively attached to the outer surface of the inner tubular member (See Werblud paragraph 0019).

Regarding claim 20, the combination of Bernstein in view of Werblud further discloses

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the resiliently compressible foam is adapted to permit the foam to be compressed, inserted into an ear canal, and allowed to expand (See Werblud paragraph 0018).

Regarding claim 21, the combination of Bernstein in view of Werblud further discloses removal structure (21, threaded inner surface of bushing 16) secured to the inner tubular member (secured to the inner tubular member by the frictional fit when the device is assembled), the removal structure configured to permit a user to remove the disposable sleeve from the sound controlling device (See Bernstein Fig. 7 and col. 2, lines 65-70).

Regarding claim 22, Bernstein discloses a method of using an elongate sound controlling device (16, bushing) having a non-constant radial profile (See Fig. 5), comprising steps of: providing a sleeve (15, tube), the sleeve comprising an inner tubular member having means to securely but releasably attach the sleeve to the elongate sound controlling structure and a fitament member (13) secured to the inner tubular member, the fitament configured to conform to an inner surface of an ear; axially sliding the disposable sleeve onto the elongate sound controlling device; and; inserting the elongate sound controlling device into an ear canal (See Figs. 5-7 and col. 2, lines 30-58). Bernstein does not expressly disclose the sleeve (15) is disposable or the fitament means is compressible foam. However, Bernstein teaches the sleeve (15) deteriorates with age due to repeated bending and flexing and teaches an easily replaceable sleeve (See col. 1, lines 22-28 and col. 2, lines 32-64). The use of disposable compressible earpieces is well-known in the art and Werblud teaches a sleeve (18) frictionally attached to a compliant, compressible fitament means (19) which is compressed upon insertion into the ear canal and expands to form an acoustic seal which are manufactured economical enough to be disposable (See Werblud Fig. 3 and paragraphs 0008, 0018 and 0019). Therefore, It would have

been obvious to one of ordinary skill in the art at the time of the invention to replace the earpiece of Bernstein with the disposable sleeve and compressible fitment means of Werblud for sanitation reasons (See Werblud paragraph 0008).

Regarding claim 23, the combination of Bernstein in view of Werblud does not expressly disclose an initial step of removing a previously installed disposable sleeve. However, Bernstein teaches a replaceable sleeve and it is therefore inherent that to replace a sleeve, the previously installed sleeve must first be removed.

Regarding claim 24, the combination of Bernstein in view of Werblud further discloses the inner tubular member includes means to permit at least a portion of the inner tubular member to expand or move radially outward to accommodate the non-constant radial profile of the elongate sound controlling structure (See Bernstein Figs. 5-7).

Regarding claim 25, Bernstein discloses a sound controlling structure comprising: an elongate sound tube (16, bushing); and a sleeve (15, tube) disposed over the elongate sound tube, the sleeve comprising: an inner tubular member having means to allow radial expansion of at least a portion thereof to securely but releasably secure the sleeve to the elongate sound tube (tubular member is flexible to allow expansion when bushing 16 is inserted for a frictional fit and releasably secure when bushing 16 is removed see Fig. 7 and col. 2, lines 28-49); and fitment means (13) to conform to an inner surface of an ear, where the fitment means is secured to the holding means See Fig. 8 and col. 2, lines 50-64). Bernstein does not expressly disclose the sleeve (15) is disposable. However, Bernstein teaches the sleeve (15) deteriorates with age due to repeated bending and flexing and teaches an easily replaceable sleeve (See col. 1, lines 22-28 and col. 2, lines 32-64). The use of disposable earpieces is well-known in the art and Werblud



teaches a sleeve (18) frictionally attached to a compliant fitment means (19) which are manufactured economical enough to be disposable (See Werblud Fig. 3 and paragraphs 0008 and 0019). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the earpiece of Bernstein with the disposable sleeve of Werblud for sanitation reasons (See Werblud paragraph 0008).

Regarding claim 26, the combination of Bernstein in view of Werblud further discloses the sleeve is compressively held in position on the elongate sound controlling structure (See Bernstein Fig. 7, col. 1, lines 22-28 and col. 2, lines 32-64 and Werblud paragraph 0019).

Regarding claim 27, the combination of Bernstein in view of Werblud further discloses the means to allow radial expansion is configured to permit at least a portion of the inner tubular member to expand or move radially outward to accommodate the non-constant radial profile of the elongate sound controlling structure (See Bernstein Figs. 5-7).

Regarding claim 28, the combination of Bernstein in view of Werblud further discloses the inner tubular member comprises a generally cylindrical tube having a distal region having a distal end and a proximal region having a proximal end, the tube having an inner surface and an outer surface (See Bernstein Fig. 5).

Regarding claim 35, the combination of Bernstein in view of Werblud does not expressly disclose the inner tubular member comprises polyethylene. However, the combination of Bernstein in view of Werblud teaches the tube is flexible plastic and expands to frictionally fit over the elongate sound controlling structure (16, bushing). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to use any semi-rigid flexible material including polyethylene for the expansion properties required for a frictional fit.

Regarding claim 36, the combination of Bernstein in view of Werblud further discloses the fitment means comprises resiliently compressible foam (20), the foam having an inner foam surface and an outer foam surface (See Werblud paragraph 0019).

Regarding claim 37, the combination of Bernstein in view of Werblud further discloses removal structure (21, threaded inner surface of bushing 16) secured to the inner tubular member (secured to the inner tubular member by the frictional fit when the device is assembled), the removal structure configured to permit a user to remove the disposable sleeve from the sound controlling device (See Bernstein Fig. 7 and col. 2, lines 65-70).

***Claim Rejections - 35 USC § 103***

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bernstein in view of Werblud as applied to claim 1 above, and further in view of Oliveira et al. U.S. Patent No. 6,310,961.

Regarding claim 19, the combination of Bernstein in view of Werblud does not expressly disclose the resiliently compressible foam is extruded over or is co-extruded with the inner tubular member. However, the use of compressible foam extruded on a sound control device is well known in the art and Oliveira teaches a resiliently flexible polymeric compressible foam sound control device extruded on a sleeve assembly (See col. 10, lines 20-45). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to extrude the compressible foam of the combination of Bernstein in view of Werblud on the inner tubular

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member to attach the foam to tubular member.

***Allowable Subject Matter***

Claims 8 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 38-46 and 48 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach a plurality of axially extending circumferentially spaced slits between the inner and outer surfaces of said tube extending from said annular portion to the second end of said tube and defining axially extending portions of said tube that can flex radially outwardly of the axis of the tube in combination with all the disclosed limitations of claim 38.

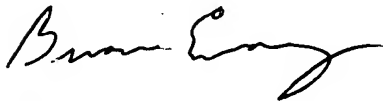
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Brian Ensey", with a stylized flourish at the end.

Brian Ensey  
Examiner  
September 22, 2006